Docket No.: TI-32591

## Abstract of the Disclosure

A technique that combines either a trellis coded modulation (TCM) coding scheme or a turbo trellis coded modulation (TTCM) coding scheme with constellation shaping and precoding schemes, and further in combination with concatenated coding schemes or when working in a non-error free operation point, to implement a binary coded communication system and method that can achieve high performance (high coding gains achieved in combination with shaping gain, and when necessary, also with high performance in ISI-channels via precoding).